

OK TO ENTER: /AW/ (12/08/2011)

**Amendments to the Claims:**

The following listing of claims replaces all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-2. (Cancelled)

3. (Currently Amended) A method for the selective enrichment of prostate cancer stem cells which express CD133, CD44, and high levels of  $\alpha_2\beta_1$  integrin which comprises the following steps:

- i) providing a cell preparation comprising prostate cancer stem cells derived from prostate tissue;
- ii) providing cell culture conditions which allow the maintenance of said prostate cancer stem cells in culture and the binding of said prostate cancer stem cells to a collagen based matrix;
- iii) selecting said bound cells wherein said for expression of CD133 and isolating bound cells that express CD133 antigen, CD44 antigen, and  $\alpha_2\beta_1$  integrin.

4. (Previously Presented) A method according to Claim 3 wherein said method includes the additional steps of:

- iv) culturing prostate cancer stem cells which express CD133 antigen in culture medium comprising granulocyte macrophage colony stimulating factor (GM-CSF), stem cell factor (SCF) and leukaemia inhibitory factor (LIF); and
- v) passaging the prostate cancer stem cells in (i) in a serum free medium.

5. (Previously Presented) A method according to Claim 3 wherein said selected cells express human epithelial antigen.

6-8. (Cancelled)

9. (Currently Amended) A method according to Claim 3 wherein said ~~cancerous~~ prostate cancer stem cells are metastatic.

10. (Currently Amended) A method according to Claim 3 wherein said ~~cancerous~~ prostate cancer stem cells are from a primary prostate tumour.
11. (Previously Presented) A method according to Claim 3 wherein said collagen based matrix comprises collagen I.
12. (Previously Presented) A prostate cancer stem cell obtainable by the method of Claim 3.
13. (Cancelled)
14. (Currently Amended) A prostate cancer stem cell according to Claim 12 wherein said stem cell is cloned.
15. (Currently Amended) A cell culture of prostate cancer stem cells wherein said cells express CD133 antigen, CD44 antigen, and  $\alpha_2\beta_1$  integrin wherein said prostate cancer stem cells have high *in vitro* proliferative potential, have higher colony forming efficiency than  $\alpha_2\beta_1$  integrin<sup>low</sup> CD133<sup>+</sup> prostate cells and can form cancerous prostatic-like acini in an immune-compromised non-human animal model.
- 16-17. (Cancelled)
18. (Previously Presented) A cell culture according to Claim 15 wherein said prostate cancer stem cells express human epithelial antigen.
- 19-20. (Cancelled)
21. (Previously Presented) A culture according to Claim 15 wherein said prostate cancer stem cells express CD133 antigen,  $\alpha_2\beta_1$  integrin, human epithelial antigen and CD44 antigen.
- 22-74. (Cancelled)